7. (Thrice Amended) A method as recited in Claim 47, wherein said forming spacers further comprises:

E1

depositing a layer of spacer material over the opening in the masking substrate; and

etching the layer of spacer material to form the spacers around the opening.

14. (Four Times Amended) A method as recited in Claim 47, wherein said first semiconductor material has a top surface, and wherein said implantation ions are directed towards said first semiconductor material in a direction that is within ten degrees from a direction that is orthogonal to the top surface.

E2

22. (Thrice Amended) A method as recited in Claim 49, wherein said forming a spacer around the opening in the hard mask comprises:

depositing a layer of spacer material over the opening in the hard mask; and

E3

anisotropically etching the layer of spacer material at the opening in the hard mask to form the spacer situated around the opening of the hard mask.

23. (Twice Amended) A method as recited in Claim 49, wherein the spacer around the opening in the hard mask comprises silicon nitride.

E4

24. (Thrice Amended) A method as recited in Claim 49, wherein the spacer is one of a pair of spacers, the ions being implanted in between but not through the pair of spacers and past the hard mask into the exposed region of the volume of silicon, and wherein the exposed region

E5

is situated between the pair of spacers, whereby the silicon dioxide is not substantially formed underneath the pair of spacers.

26. (Thrice Amended) A method as recited in Claim 49, further comprising forming a pad oxide layer upon the volume of silicon prior to forming the hard mask over the volume of silicon of the substrate assembly, the hard mask being formed upon the pad oxide layer, and said forming a hard mask over a volume of silicon of a substrate assembly comprising:

forming the hard mask upon the pad oxide layer; and

forming a photoresist mask over the hard mask; and wherein silicon dioxide is formed in the volume of silicon at the region beneath the opening in the hard mask.

28. (Twice Amended) A method as recited in Claim 26, wherein said forming an opening in the hard mask comprises etching through the hard mask and the pad oxide layer.

29. (Thrice Amended) A method as recited in Claim 49, wherein the exposed region of a volume of silicon has a top surface, and said bombarding the exposed region of the volume of silicon with silicon ions through the opening in the hard mask is conducted such that the direction that the ions are implanted into the exposed region is within ten degrees from a direction that is orthogonal to the top surface.

30. (Thrice Amended) A method as recited in Claim 49, wherein said oxidizing the volume of silicon to form silicon dioxide further comprises heating the substrate assembly while exposing the substrate assembly to oxygen.

31. (Thrice Amended) A method as recited in Claim 49, wherein the volume of silicon comprises monocrystalline silicon having a lattice structure, and wherein the implanted silicon ions in the monocrystalline silicon cause the lattice structure of the monocrystalline silicon to become partially randomized at the exposed region into which the ions are implanted.

47. (Once Amended) A method for forming an oxide region on a substrate assembly, the method comprising:

providing a substrate assembly having a first semiconductor material and a masking substrate thereover, wherein said masking substrate comprises at least one unmasked opening that has an opening width, such that said unmasked opening is defined by a masking substrate-free region on said substrate assembly, wherein said masking substrate-free region has a width that is said opening width;

forming spacers in said masking substrate, wherein said unmasked opening is defined by said spacers, and each of said spacers extends from the substrate assembly to contact said masking substrate;

selecting ions to be implanted into said first semiconductor material as implantation ions, wherein said selecting is performed such that said ions do not alter the electrical charge characteristics of said first semiconductor material, and such that said masking substrate is impermeable to said ions;

bombarding through said unmasked opening said first semiconductor material with implantation ions to produce an implanted region; and

forming an oxide of said first semiconductor material throughout said opening width by exposing said implanted region to a gas phase oxidant, wherein said

bombarding and said exposing are performed through said unmasked opening, and said bombarding and said exposing are performed over the entire opening width of said unmasked opening, and no additional layer is formed within said unmasked opening after said bombarding and prior to said forming an oxide.

48. (Once Amended) A method as recited in Claim 47, wherein said implantation ions are ions of said first semiconductor material.

Please add the following new claim:

49. A method for forming an oxide region on a substrate assembly, the method comprising the steps of:

forming a hard mask over a volume of silicon of a substrate assembly;

forming an opening in the hard mask to expose a region of the volume of silicon;

forming a spacer around the opening in the hard mask, said spacer extending from the volume of silicon to contact the hard mask;

bombarding the exposed region of the volume of silicon with silicon ions through the opening in the hard mask so as to leave unaltered the conductivity type of the exposed region of the volume of silicon, wherein said bombarding implants silicon ions immediately adjacent to but not through the spacer around the opening in the hard mask; and

oxidizing the volume of silicon to form silicon dioxide by exposure through said opening of the exposed region to oxygen, wherein said bombarding and said oxidizing are performed through said opening having a width that is substantially the same at said bombarding as at said oxidizing, and wherein no additional layer is formed within said opening after said bombarding and prior to said oxidizing.